Billing Code: 3510-22-S

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 042804B; Docket No. 040511147-4147-01]

Listing Endangered and Threatened Species and Designating Critical Habitat: Petitions to List the Cherry Point Stock of Pacific Herring as an Endangered or Threatened Species

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of findings; request for information; and initiation of status review.

SUMMARY: NMFS received a petition on January 22, 2004, to list the Cherry Point (Puget Sound, Washington) stock of Pacific herring (Clupea pallasi) as a threatened or endangered species under the Endangered Species Act (ESA). NMFS finds that the January 22, 2004, petition fails to present substantial scientific and commercial information indicating that the petitioned action may be warranted. On May 14, 2004, the same petitioners submitted additional scientific information, including information regarding the stock structure of the Cherry Point and other Pacific Northwest herring stocks. NMFS considers the petitioners' supplemental submission (in conjunction with the original January 22, 2004, submission) as a distinct petition received by the agency on May 14, 2004. NMFS finds that the supplemental May 14, 2004, petition does present substantial scientific and commercial information indicating that the petitioned action may be warranted. Accordingly, NMFS is initiating a status review of the

species. To ensure that the status review is complete and based upon the best available scientific and commercial information, NMFS is soliciting information regarding: the population structure and viability of nearshore stocks of Pacific herring in Puget Sound (Washington) and the Strait of Georgia (Washington and British Columbia); efforts being made to protect the species; and potential peer reviewers.

DATES: Information and comments on the subject action must be received by [insert date 60 days after date of publication in the FEDERAL REGISTER]

ADDRESSES: You may submit comments, identified by Docket No. 040511147-4147-01, by any of the following methods:

- E-mail: herring.nwr@.noaa.gov. Include Docket No. 040511147-4147-01 in the subject line of the message.
- Agency Web Site: http://ocio.nmfs.noaa.gov/ibrm-ssi/index.shtml. Follow the instructions for submitting comments at: http://ocio.nmfs.noaa.gov/ibrm-ssi/process.shtml.
- Mail: Submit written comments and information to Chief, NMFS, Protected Resources Division, 525 NE Oregon Street, Suite 500, Portland, Oregon, 97232-2737. You may hand-deliver written comments to our office during normal business hours at the street address given above.
- Hand Delivery/Courier: NMFS, Protected Resources Division, 525 NE Oregon Street, Suite 500, Portland, Oregon, 97232-2737.
- Fax: 503-230-5435

FOR FURTHER INFORMATION CONTACT: For further information regarding this notice contact Garth Griffin, NMFS, Northwest Region, (503) 231-2005, or Marta Nammack, NMFS, Office of Protected Resources, (301) 713-1401.

SUPPLEMENTARY INFORMATION:

Background

On January 22, 2004, NMFS received a petition (hereafter referred to as "the January 22nd petition") from the Northwest Ecosystem Alliance, the Center for Biological Diversity, Ocean Advocates, People for Puget Sound, Public Employees for Environmental Responsibility, Sam Wright, and the Friends of the San Juans to find that the Cherry Point (Washington) stock of Pacific herring qualifies as a Distinct Population Segment (DPS) and warrants listing as a threatened or endangered species under the ESA. Subsequently, on May 14, 2004, the same petitioners submitted additional information including new genetic information on the stock structure of Pacific herring in Puget Sound and the Strait of Georgia (Washington) that had become available since NMFS' receipt of the January 22nd petition. Upon receipt of the supplemental information, NMFS had not made its 90-day finding on the January 22nd petition. NMFS is treating the supplemental submission, in conjunction with the information already submitted by the same petitioners on January 22, 2004, as a new petition received by the agency on May 14, 2004 (hereafter referred to as the "May 14th petition"). Copies of the two petitions are available from NMFS (See ADDRESSES section, above, and "References" section, below).

ESA Statutory and Policy Provisions

Section 4(b)(3) of the ESA contains provisions concerning petitions from interested persons requesting the Secretary of Commerce (Secretary) to list species under the ESA (16

U.S.C. 1533(b)(3)(A)). Section 4(b)(3)(A) requires that, to the maximum extent practicable, within 90 days after receiving such a petition, the Secretary make a finding whether the petition presents substantial scientific and commercial information indicating that the petitioned action may be warranted. NMFS' ESA implementing regulations define Asubstantial information@ as the amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted. In evaluating a petitioned action, the Secretary considers several factors, including whether the petition contains detailed narrative justification for the recommended measure, describing, based on available information, past and present numbers and distribution of the species involved and any threats faced by the species (50 CFR 424.14(b)(2)(ii)). In addition, the Secretary considers whether the petition provides information regarding the status of the species over all or a significant portion of its range (50 CFR 424.14(b)(2)(iii)).

For the subject January 22nd and May 14th petitions, NMFS evaluated whether the information provided and cited therein meets the ESA=s standard for Asubstantial information.@ The agency also reviewed other information readily available to NMFS scientists (i.e., currently within agency files) to determine whether there is general agreement with the information presented in the petitions. NMFS further consulted with co-manager Pacific herring experts from the Washington Department of Fish and Wildlife (WDFW), and from Washington tribes including the Swinomish Indian Tribal Community, the Lummi Indian Nation, the Suquamish Tribe, and the Northwest Indian Fisheries Commission.

Under the ESA, a listing determination may address a species, subspecies, or a DPS of any vertebrate species which interbreeds when mature (16 U.S.C. 1532(15)). On February 7,

1996, the U.S. Fish and Wildlife Service and NMFS adopted a policy to clarify the agencies' interpretation of the phrase "distinct population segment of any species of vertebrate fish or wildlife" (ESA section 3(15)) for the purposes of listing, delisting, and reclassifying a species under the ESA (51 FR 4722). The joint DPS policy identified two elements that must be considered when making DPS determinations: (1) The discreteness of the population segment in relation to the remainder of the species (or subspecies) to which it belongs; and (2) the significance of the population segment to the remainder of the species (or subspecies) to which it belongs.

A population segment may be considered discrete if it satisfies either one of the following conditions: (1) it is markedly separated from other populations of the same biological taxon as a consequence of physical, physiological, ecological, or behavioral factors (quantitative measures of genetic or morphological discontinuity may provide evidence of this separation); or (2) it is delimited by international governmental boundaries across which there is a significant difference in exploitation control, habitat management or conservation status. Under the joint DPS policy, if a population is determined to be discrete, the agency must then consider whether it is significant to the taxon to which it belongs. Considerations in evaluating the significance of a population include: persistence of the discrete population in an unusual or unique ecological setting for the taxon; evidence that the loss of the discrete population segment would cause a significant gap in the taxon's range; evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere outside its historical geographic range; or evidence that the discrete population segment has marked genetic differences from other populations of the species.

A species, subspecies, or DPS is "endangered" if it is in danger of extinction throughout all or a significant portion of its range, and "threatened" if it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range (ESA Sections 3(6) and 3(19), respectively).

Life History of Pacific Herring

Pacific herring in the Eastern Pacific Ocean range from northern Baja California north to Cape Bathurst in the Beaufort Sea (Hart, 1973; Lassuy, 1989). They are also found in Arctic waters from Coronation Gulf, to the Chukchi Sea, and the Russian Arctic. In the Western Pacific they are found from Toyama Bay, Japan, west to Korea and the Yellow Sea (Haegele and Schweigert, 1985; Wang, 1986).

Pacific herring adults move inshore during winter and early spring and reside in holding areas before moving to adjacent spawning grounds (Hay, 1985). Spawning grounds are typically in sheltered inlets, sounds, bays, and estuaries (Haegele and Schweigert, 1985). Pacific herring usually spawn in shallow subtidal zones, depositing adhesive eggs over algae, vegetation, or other substrates (Emmett et al., 1991). The location and timing of spawning for individual stocks are generally consistent and predictable from year to year (Hay et al., 1989; O'Toole et al., 2000).

Herring spawning time varies with latitude, with earlier spawning times (e.g., early winter) occurring in the more southern latitudes of the species' range, and later spawning times (e.g., mid-summer) occurring toward the north of the species' range (Hay, 1985). In Puget Sound, spawning generally occurs from January to April, with peak spawning activity in February and March (Bargmann, 1998).

Pacific herring larvae drift in the ocean currents after hatching and are abundant in shallow nearshore waters (Lassuy, 1989; Hay and McCarter, 1997). After 2 to 3 months, larvae metamorphose into juveniles which form large schools and remain primarily in inshore waters during their first summer. Juveniles usually stay in nearshore shallow-water areas until fall. After their first summer, juveniles may disperse to deeper offshore waters to mature (Stocker and Kronlund, 1985), or reside year-round nearshore or in estuaries prior to spawning (Hay, 1985). For example, in Puget Sound some herring stocks spend their entire life residing within Puget Sound, while other stocks are migratory and occur during summer in the coastal areas off Washington and southern British Columbia (Trumble, 1983). The age at first maturity is generally 2 to 5 years (Hay, 1985), with lengths ranging from 13 to 26 cm (Garrison and Miller, 1982; Emmett et al., 1991). In Puget Sound, Pacific herring reach sexual maturity at age-2 to age-4 (Bargmann, 1998), while stocks in the Strait of Georgia and other major Pacific herring assessment areas in British Columbia reach sexual maturity at age-3 (Hay and McCarter, 1999). Herring may spawn annually for several years (Bargmann, 2001), with fecundity increasing as their body size increases (Hart, 1973).

In the state of Washington there are 21 documented spawning stocks: 19 stocks in Puget Sound (including the Cherry Point stock and the recently re-discovered Woolochet Bay stock), and two on the Washington Coast (Bargmann, 1998; Koenings, 2000). The Cherry Point herring stock spawns along the coastline from the north end of Bellingham Bay and Lummi Island (Washington), north to Point Roberts (Canada) (Lemberg et al., 1997). The Cherry Point stock exhibits later spawning time (late March to early June) than other Puget Sound stocks (January to late April) (Lemberg et al., 1997), but similar to some locations in British Columbia (Stout et al.,

2001).

Relationship of Stock and DPS Concepts

Pacific herring in the vicinity of Cherry Point (Washington) are considered to be a stock for management purposes in the state of Washington (Bargmann, 1998). There is no definition of the term "stock" that is generally accepted by all fisheries biologists (Stout et al., 2001). The term stock has been used to refer to: fish spawning in a particular place or time, separated to a substantial degree from fish spawning in a different place or time (Ricker, 1972); a population sharing a common environment that is sufficiently discrete to warrant consideration as a self-perpetuating system that can be managed separately (Larkin, 1972); a species group or population of fish that maintains and sustains itself over time in a definable area (Booke, 1981); and, an intraspecific group of randomly mating individuals with temporal or spatial integrity (Ihssen et al., 1981). None of these definitions imply that a fish stock is ecologically, biologically, or physiologically significant in relation to the biological species as a whole. Hence, information establishing a group of fish as a stock, such as the Cherry Point stock of Pacific herring, does not necessarily qualify it as a DPS. A DPS may be composed of a group of related stocks, or in some cases (if the evidence warrants) a single stock, that form(s) a discrete population and are (is) significant to the biological species as a whole.

2001 Pacific Herring Status Review

NMFS completed a status review of Pacific Herring in 2001 (Stout et al., 2001). NMFS initiated this review in response to a petition received in February 1999 to list 18 species of marine fishes in Puget Sound, including Pacific herring. NMFS concluded that the Pacific herring stocks in Puget Sound do not constitute a DPS, and thereby do not qualify as a "species"

under the ESA. NMFS found that these stocks, including the Cherry Point herring stock, belonged to a larger Georgia Basin Pacific herring DPS consisting of inshore stocks from Puget Sound and the Strait of Georgia (64 FR 17659; April 3, 2001). The stocks within the Georgia Basin DPS exhibit consistent spawning times and locations. There is considerable evidence of straying by adults and juveniles (Hay et al., 1999), resulting in little genetic differentiation among stocks. NMFS noted that several herring stocks within the Georgia Basin DPS (including the Cherry Point stock) have shown marked declines in range and abundance, and are classified as "depressed" or "critical" by the state of Washington (Bargmann, 1998). However, NMFS concluded that the Georgia Basin Pacific herring DPS is not threatened or endangered throughout all or a significant portion of its range (64 FR 17659; April 3, 2001).

Analysis of the Petitions

NMFS evaluated the petitions to determine if they present substantial scientific and commercial information to suggest that the Cherry Point herring stock may qualify as a DPS, and, if so, that such a DPS may be threatened or endangered throughout all or a significant portion of its range. NMFS was especially interested in information that was not considered in the Stout et al. (2001) Pacific herring status review. Essential considerations in evaluating the petitions included whether they present substantial information indicating: (1) the discreteness of the Cherry Point herring stock; (2) the significance of the Cherry Point herring stock; and, if these first two were satisfied, (3) the risk to the survival of a putative Cherry Point Pacific herring DPS throughout all or a significant portion of its range.

Upon receipt of the January 22nd petition, scientists at NMFS' Northwest Fisheries Science Center (NWFSC) evaluated the information contained therein, as well as other

information available to the agency. Additionally, NMFS consulted with co-manager Pacific herring experts from the WDFW and Washington tribes. The NWFSC presented its review of the January 22nd petition in a March 30, 2004, memorandum (NMFS, 2004a). Upon receipt of the May 14th petition, the NWFSC evaluated the information contained therein, in conjunction with the material previously submitted in the January 22nd petition. This latter review is presented in a July 19, 2004 memorandum (NMFS, 2004b). NMFS' analysis of the petitions is summarized below, and organized with respect to the discreteness, significance, and survival risk of the Cherry Point Pacific herring stock.

January 22nd Petition

Discreteness of the Population Segment

Genetic Information – NMFS' 2001 determination of a Georgia Basin Pacific herring DPS considered, in part, genetic analyses of protein variants called "allozymes" (Utter, 1972; Utter et al., 1974; Grant, 1979, 1981; Grant and Utter, 1984). Allozyme variation in Pacific herring indicates genetic differentiation over relatively large geographic areas, such as among herring in Asia, the East Bering Sea, the Gulf of Alaska, and the Eastern North Pacific (Grant and Utter, 1984). The January 22nd petition presents genetic information that the petitioners contend suggest that the Cherry Point herring stock is discrete under the joint DPS policy. The January 22nd petition presents new genetic information from the Canadian Department of Fisheries and Oceans (Beacham et al., 2001, 2002) addressing the Cherry Point stock and stocks in British Columbia.

Beacham et al. (2001), using microsatellite DNA analyses, compared levels of genetic distance among 65 herring samples from Southeast Alaska, British Columbia, and Washington.

Microsatellite DNA markers, such as those used in Beacham et al. (2001), can potentially detect stock structure on finer spatial and temporal scales than can other DNA or protein markers (Stout et al., 2001). Beacham et al. (2001) found no genetic differentiation among samples from the five British Columbia herring management stocks. However, a few samples, including the sample from Cherry Point, exhibited statistically significant allele frequency differences at some microsatellite loci compared to other samples in the study. The petitioners conclude in the January 22nd petition, on the basis of the Beacham et al. (2001) study, that Cherry Point herring are genetically discrete compared to other herring stocks.

NMFS does not agree with the interpretation of Beacham et al. (2001) presented in the January 22nd petition. The study lacks the necessary spatial and temporal coverage of samples to draw any firm conclusions regarding the discreteness of the Cherry Point stock. First, the study focused on the stock structure of herring in British Columbia. The Cherry Point sample analyzed in this study was the only sample from herring stocks in Washington State and Puget Sound; hence the study design does not inform considerations of population structure within the Puget Sound, Washington portion of the Georgia Basin DPS. Second, although Beacham et al. (2001) did indeed find statistically significant differentiation between the (single) Cherry Point sample and the geographically closest Canadian sampling sites, a single sample does not provide persuasive evidence of population discreteness. The authors noted that the result may be a sampling artifact. The individual Strait of Georgia samples were collected over several years from 1997-2000, while the Cherry Point sample was collected in 2000. The authors cautioned that it is premature to reach conclusions about population structure given the samples analyzed; additional samples are needed to evaluate whether differentiation among sites is stable over time.

For genetic differences to signify substantial reproductive isolation among populations, rather than annual variation or sampling error, differences among putative populations over time must generally be larger than the temporal variation within populations (Beacham et al., 2001; Waples, 1998).

An updated version of the Beacham et al., (2001) study has included additional sampling locations, and has added additional temporal samples at several locations (Beacham et al., 2002). However, as in the Beacham et al. (2001) study, only a single May 2000 Cherry Point sample is included in the analysis. Without samples collected in multiple years it is impossible to analyze the temporal stability of genetic differences found between the single Cherry Point sample and British Columbia samples collected in other years (Beacham et al., 2002).

Although NMFS is very supportive of ongoing genetic research on the stock structure of Pacific herring, such as the research of Beacham et al. (2001, 2002) and others, the new genetic information included in the January 22nd petition does not present substantial information to suggest that the Cherry Point stock is discrete, or that NMFS' 2001 determination of a Georgia Basin Pacific Herring DPS otherwise needs to be re-examined (NMFS, 2004a).

Physiological Information – The January 22nd petition presents new physiological information to suggest that the Cherry Point stock is discrete under the joint DPS policy. Gao et al. (2001) analyzed the composition of herring otoliths (small calcium carbonate structures found in the heads of all bony fishes that function in fish hearing and balance) among three stocks in Puget Sound. The ratios of stable isotopes of oxygen and carbon vary naturally in the marine environment, predominantly due to temperature and salinity. Otoliths deposit daily growth increments, incorporating the stable isotopic composition of the surrounding environment. Fish

that rear in environments with distinct isotopic signatures can be distinguished by analyzing the isotopic composition of their otoliths. Gao et al. (2001) compared the isotopic ratios of otolith nuclei (representing the isotopic composition during the first 6 months of growth) among spawning adult herring from Cherry Point and two locations in south Puget Sound. Gao et al. (2001) found a statistically significant difference in isotopic composition between the Cherry Point samples and the samples from the two south Puget Sound locations. Their findings suggest that Cherry Point herring are a separate stock, consistent with the findings of Bargmann (1998) and Lemberg et al. (1997). However, some of the Cherry Point samples in Gao et al. (2001) exhibited isotopic ratios characteristic of the south Puget Sound samples. This observation suggests that some herring adults that reared elsewhere in Puget Sound may have strayed to the Cherry Point vicinity to spawn, or that water conditions characteristic of the south Puget Sound locations may also occur in the vicinity of Cherry Point. In NMFS' 2001 status review, considerable evidence of straying by adults and juveniles among stocks differing in spawning time and location argued for the delineation of the larger Georgia Basin DPS. NMFS concludes that the findings of Gao et al. (2001) are consistent with its 2001 DPS finding (NMFS, 2004a). While the stable isotope analysis may provide useful insights to early rearing conditions and stock structure, they do not provide substantial information regarding the physiological discreteness of the Cherry Point stock.

Behavioral and Ecological Information – In the January 22nd petition the petitioners also discuss distinct patterns in spawning time and location (Lemberg et al., 1997), and parasitic communities (O'Toole et al., 2000; Trumble, 1983; Hershberger, 2002) in Cherry Point herring relative to other stocks. These patterns, however, were discussed in detail in NMFS' 2001 status

review (Stout et al., 2001) in identifying the Georgia Basin Pacific herring DPS. As noted in the "Relationship of Stock and DPS Concepts" section above, patterns that establish a group of fish as a stock do not necessarily indicate that it is a DPS.

The January 22nd petition fails to present substantial information relevant to the discreteness of the Cherry Point stock (NMFS, 2004a).

Significance of the Population Segment

With respect to the considerations for significance articulated in the DPS policy, the petitioners assert in the January 22nd petition that the Cherry Point herring stock is significant to the taxon to which it belongs because it: exhibits marked differences in genetic characteristics from other populations; and occupies a unique ecological setting for the taxon. Except for the study by Beacham et al. (2001) discussed above, the January 22nd petition does not present any information pertaining to the potential genetic significance of the Cherry Point stock to Pacific herring that was not considered in NMFS' 2001 status review. For the reasons set forth above (in the "Discreteness – Genetic Information" section), the Beacham et al. (2001, 2002) studies do not indicate that the Cherry Point stock exhibits marked differences in genetic characteristics, or is otherwise significant to the taxon to which it belongs. In the 2001 status review NMFS concluded that the Cherry Point herring stock does not represent a unique ecological setting for Pacific herring, as similar environmental conditions exist for several herring populations in British Columbia (Stout et al., 2001). The January 22nd petition fails to present substantial information pertaining to the significance of the Cherry Point ecological setting with respect to the species (NMFS, 2004a).

Survival Risk

Since the January 22nd petition does not present substantial information to suggest that the Cherry Point stock may warrant delineation as a separate DPS (NMFS, 2004a), it is unnecessary to consider survival risk in evaluating whether the petitioned action may be warranted.

Finding on January 22nd Petition

After reviewing the information contained in the January 22nd petition, as well as information readily available to NMFS scientists, NMFS determines that it fails to present substantial scientific and commercial information indicating the petitioned action may be warranted for the Cherry Point stock of Pacific herring.

May 14th Petition

Discreteness of the Population Segment

The May 14th petition presents additional new genetic information from WDFW (Small et al., 2004) addressing the relatedness of the Cherry Point and other herring stocks in Puget Sound. Small et al. (2004) describe microsatellite DNA variation within and among 16 samples of Pacific herring, including 12 samples from Puget Sound, 4 of which were samples from the Cherry Point stock from different years. Similar to the Beacham et al. (2001, 2002) studies (described above under the January 22nd petition), the Small et al. (2004) study found low levels of genetic differentiation among samples. However, the four Cherry Point samples were consistently differentiated from other Puget Sound samples, providing some evidence for potential population discreteness. The new information presented in the May 14th petition, in combination with the information presented in the January 22nd petition (e.g., the Beacham et al. 2001, 2002 studies), represents substantial information pertaining to the discreteness of the Cherry Point stock of Pacific herring (NMFS, 2004b).

The results of Small et al. (2004) need to be reconciled with other studies (not presented in the petitions but currently within agency files) that seem to indicate that the Cherry Point stock is not discrete. Three recent studies evaluating the distribution patterns of Pacific herring, using an extensive herring tagging database for British Columbia, do not appear to point to the discreteness of the Cherry Point stock (Hay et al., 2001; Hay and McKinnell, 2002; Ware and Schweigert, 2001). Additionally, two other studies (Markiewicz et al., 2001; Landis et al., 2004) provide some evidence of episodic immigration into the Cherry Point stock from other stocks in years of high abundance, although the data are subject to alternative interpretations. These studies suggesting that the Cherry Point herring stock may be part of a larger metapopulation need to be reconciled with the genetic differentiation described by Small et al. (2004).

Significance of the Population Segment

Under the joint DPS policy, a discrete population segment may be significant to the taxon to which it belongs if there is evidence that it differs markedly from other populations its genetic characteristics (61 FR 4722; February 7, 1996). The new genetic information presented in the May 14th petition (i.e., Small et al., 2004) presents substantial information indicating that the Cherry Point Pacific herring stock may be significant with respect to the species.

Survival Risk

The majority of the information in the January 22nd petition and the May 14th petition regarding the abundance, trends, and survival risk of the Cherry Point stock was evaluated in NMFS' 2001 status review. The petitions provide additional information regarding spawner biomass estimates for 2001-2004 for the period since the status review. The petitioners note that the Cherry Point herring stock has declined dramatically over the last three decades, with the

spawning biomass in 2000 representing a 94 percent decline from historical observations. The 2001 status review noted that a decline of this magnitude meets an International Union for the Conservation of Nature and Natural Resources (IUCN) criterion for "vulnerable" species considered to be facing a high risk of extinction in the wild (Stout et al., 2001). Additionally, a quantitative analysis of trends in Cherry Point herring biomass indicated that, at the time of the 2001 status review, there was a 50 percent chance that the Cherry Point stock would decline to one ton or less in 100 years (Stout et al., 2001). Although the Cherry Point stock has more than doubled in spawner biomass over the past 4 years and is at its highest level since 1996, the spawner biomass is at half the level set by WDFW (Bargmann, 2001) as necessary for the stock to maintain itself and provide harvest (although a stock below optimal harvest levels is not necessarily in danger of extinction or likely to become so in the foreseeable future). Given that the May 14th petition presents substantial information that the Cherry Point stock may warrant delineation as a separate DPS (see May 14th petition "Discreteness" and "Significance" sections, above), the information previously reviewed in 2001 (Stout et al., 2001) and reiterated in the petitions represents substantial information indicating that a putative Cherry Point DPS may be threatened or endangered throughout all or a significant portion of its range (NMFS, 2004b).

Finding on May 14th Petition

After reviewing the information contained in the petitions regarding the Cherry Point stock of Pacific herring, consulting with co-manager herring experts, and reviewing information readily available to NMFS scientists, NMFS determines that the May 14th petition presents substantial scientific and commercial information indicating that the petitioned action may be warranted. In accordance with section 4(b)(3)(B) of the ESA and NMFS' implementing

regulations (50 CFR 424.14(b)(2)), NMFS will commence a review of the status of the species concerned and make a determination of whether the petitioned action is warranted within 12 months of receiving the May 14th petition.

Listing Factors and Basis for Determination

Under section 4(a)(1) of the ESA, a species can be determined to be threatened or endangered based on any of the following factors: (1) The present or threatened destruction, modification, or curtailment of a species' habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting the species continued existence. Listing determinations are based solely on the best available scientific and commercial data after taking into account any efforts being made by any state or foreign nation to protect the species.

Information Solicited

DPS Structure and Extinction Risk of Pacific Herring

To ensure that the updated status review is complete and based on the best available and most recent scientific and commercial data, NMFS is soliciting information and comments (see DATES and ADDRESSES) concerning the Georgia Basin DPS of Pacific herring, inclusive of the Cherry Point herring stock. NMFS is soliciting information on inshore herring stocks from Puget Sound (Washington) and the Strait of Georgia (Washington and British Columbia) such as: (1) biological or other data relevant to determining the DPS structure of Pacific herring in Puget Sound and the Strait of Georgia (e.g., age structure, genetics, migratory patterns, morphology, physiology); (2) the abundance and biomass, as well as the spatial and temporal distribution of

herring stocks in Puget Sound and the Strait of Georgia; (3) trends in abundance and distribution; (4) natural and human-influenced factors that cause variability in survival, distribution, and abundance; and (5) current or planned activities and their possible impact on Pacific herring (e.g., harvest measures and habitat actions). NMFS is particularly interested in such information for the period since the 2001 status review of Pacific herring.

Efforts Being Made to Protect Pacific Herring

Section 4(b)(1)(A) of the ESA requires the Secretary to make listing determinations solely on the basis of the best scientific and commercial data available after conducting a review of the status of a species and after taking into account efforts being made to protect the species. Therefore, in making its listing determinations, NMFS first assesses the status of the species and identifies factors that have led to the decline. NMFS then assesses conservation measures to determine whether they ameliorate a species' extinction risk (50 CFR 424.11(f)). In judging the efficacy of conservation efforts, NMFS considers the following: the substantive, protective, and conservation elements of such efforts; the degree of certainty that such efforts will reliably be implemented; the degree of certainty that such efforts will be effective in furthering the conservation of the species; and the presence of monitoring provisions to determine effectiveness of recovery efforts and that permit adaptive management (68 FR 15100; March 28, 2003). In some cases, conservation efforts may be relatively new or may not have had sufficient time to demonstrate their biological benefit. In such cases, provisions of adequate monitoring and funding for conservation efforts are essential to ensure that the intended conservation benefits are realized. NMFS encourages all parties to submit information on ongoing efforts to protect and

conserve Pacific herring in Washington and British Columbia, as well as information on recently implemented or planned activities (i.e., since the 2001 status review) and their likely impact(s).

Identification of Peer Reviewers

On July 1, 1994, NMFS, jointly with the U.S. Fish and Wildlife Service, published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270). The intent of the peer review policy is to ensure that listings are based on the best scientific and commercial data available. If NMFS determines that listing is warranted, the agency will solicit the expert opinions of at least three qualified specialists, concurrent with the public comment period following the publication of a proposed rule. In advance of any such determination, NMFS is soliciting the names and affiliations of potential independent peer reviewers from the academic and scientific community, Native American tribal groups, federal and state agencies, and the private sector.

References

Copies of the petition and related materials are available on the Internet at http://www.nwr.noaa.gov/1salmon/salmonesa/herring/reference.html, or upon request (see ADDRESSES section above).

Authority: 16 U.S.C. 1531 et seq.

Dated:

_____

William T. Hogarth,
Assistant Administrator for Fisheries,
National Marine Fisheries Service.